Datasheet for ABIN964991

Goat anti-Rabbit IgG (Heavy & Light Chain) Antibody (Atto 647N) - Preadsorbed

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Overview

Quantity:	100 µg
Target:	IgG
Binding Specificity:	Heavy & Light Chain
Reactivity:	Rabbit
Host:	Goat
Clonality:	Polyclonal
Conjugate:	Atto 647N
Application:	Western Blotting (WB), FLISA, Fluorescence Microscopy (FM)

Product Details

Immunogen:	Immunogen: Rabbit IgG whole molecule
Isotype:	IgG
Specificity:	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Rabbit IgG and Rabbit Serum.
Characteristics:	Anti-Rabbit IgG (H&L) conjugated to ATTO 647N is designed for STED microscopy, FRET, immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. This product is designed for STED microscopy, FRET, immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial

Product Details

	platforms.
Purification:	Preadsorption: Solid phase absorption
Labeling Ratio:	2.5

Target Details

Target:	IgG
Abstract:	IgG Products
Target Type:	Antibody
Background:	Synonyms: Goat anti-Rabbit IgG Antibody ATTO647N Conjugation, Goat anti-Rabbit IgG ATTO 647N Conjugated Antibody Background: Anti-Rabbit IgG (H&L) ATTO 647N Antibody generated in goat detects reactivity to Rabbit IgG. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75 % of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the compliment cascade, and opsinization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both the Heavy and Light chains of the antibody molecule are present. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.

Application Details

Application Notes:	Application Note: Anti-Rabbit IgG (H&L) conjugated to ATTO 647N is designed for STED microscopy, FRET, immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this ATTO conjugate matches the principle output wavelengths of most common fluorescence instrumentation. FLISA Dilution: >1:20,000 Western Blot Dilution: >1:10,000 IF Microscopy Dilution: >1:5,000

Application Details

Comment:	The emission spectra for this ATTO conjugate matches the principle output wavelengths of most common fluorescence instrumentation.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 500 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid cycles of freezing and thawing. Dilute only prior to immediate use Product is photosensitive and should be protected from light.
Storage:	RT,4 °C,-20 °C
Storage Comment:	Store vial at -20 °C prior to opening. Aliquot contents and freeze at -20 °C or below for extended storage. This product is stable for several weeks at 0 °C as an undiluted liquid.
Expiry Date:	12 months

Publications

Product cited in:	Truckenbrodt, Viplav, Jähne, Vogts, Denker, Wildhagen, Fornasiero, Rizzoli: "Newly produced synaptic vesicle proteins are preferentially used in synaptic transmission." in: **The EMBO journal** , Vol. 37, Issue 15, (2019) (PubMed). Hruska, Henderson, Le Marchand, Jafri, Dalva: "Synaptic nanomodules underlie the organization and plasticity of spine synapses." in: **Nature neuroscience**, Vol. 21, Issue 5, pp. 671-682, (2019) (PubMed).

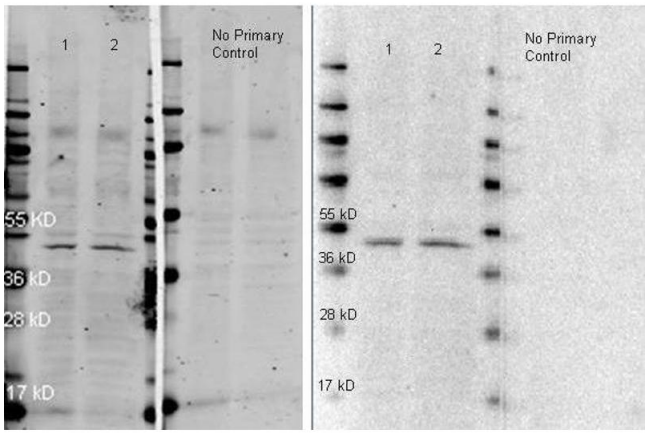
Publications

Purkey, Woolfrey, Crosby, Stich, Chick, Aoto, DellAcqua: "AKAP150 Palmitoylation Regulates Synaptic Incorporation of Ca2+-Permeable AMPA Receptors to Control LTP." in: **Cell reports**, Vol. 25, Issue 4, pp. 974-987.e4, (2018) (PubMed).

Gomes de Castro, Höbartner, Opazo: "Aptamers provide superior stainings of cellular receptors studied under super-resolution microscopy." in: **PLoS ONE**, Vol. 12, Issue 2, pp. e0173050, (2017) (PubMed).

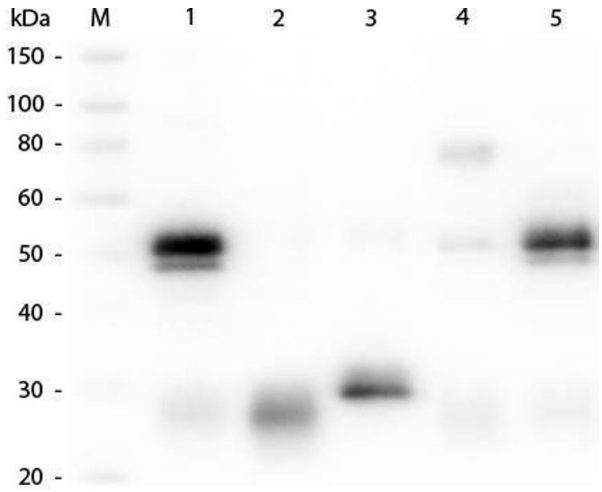
Saka, Vogts, Kröhnert, Hillion, Rizzoli, Wessels: "Correlated optical and isotopic nanoscopy." in: **Nature communications**, Vol. 5, pp. 3664, (2015) (PubMed).

Images



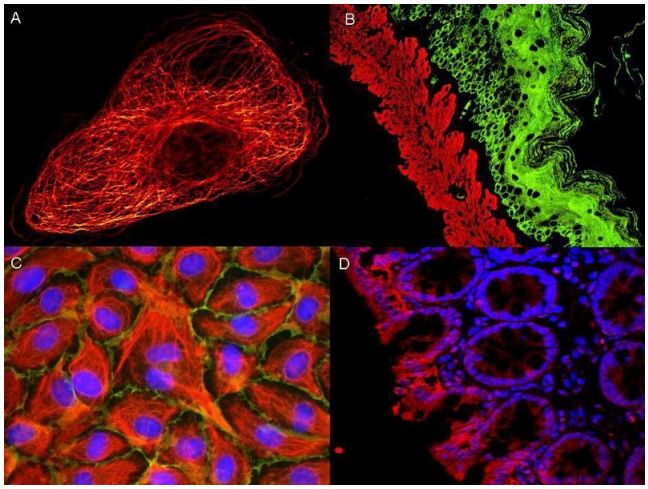
Western Blotting

Image 1. ATTO 647N conjugated anti rabbit antibody was used to detect anti-Beta Actin antibody lot 26928). Hela (Lane 1) and NIH 3T3 (Lane 2) Whole cell lysates were run on a 4-20% gel, transferred to nitrocellulose under standard conditions, and incubated with anti beta actin at a dilution of 1:2000 (ON 4°C). For secondary antibody detection, blot was incubated for 1 hr RT simultaneously with: 1. ATTO 647N conjugated anti rabbit antibody 26426C, 1:10000 in ABIN925618, Shown on Left and 2. HRP conjugated anti rabbit IgG (611-1322 lot 19247, 1:10000 in ABIN925618, shown on right) Blot was dried, imaged at a wavelength of 700 nm on a LiCor Odyssey reader, rewetted in TBS and imaged after 2 min with a 30 sec exposure time using Femtomax-110 super sensitive Chemiluminescent substrate using the Biorad Versa Doc Imaging System.



Western Blotting

Image 2. Western Blot of Anti-Rabbit IgG (H&L) (GOAT) Antibody (Min X Bv, Ch, Gt, GP, Ham, Hs, Hu, Ms, Rt & Sh Serum Proteins) . Lane M: 3 µl Molecular Ladder. Lane 1: Rabbit IgG whole molecule . Lane 2: Rabbit IgG F(ab) Fragment . Lane 3: Rabbit IgG F(c) Fragment . Lane 4: Rabbit IgM Whole Molecule . Lane 5: Normal Rabbit Serum . All samples were reduced. Load: 50 ng per lane. Block: ABIN925618 for 30 min at RT. Primary Antibody: Anti-Rabbit IgG (H&L) (GOAT) Antibody (Min X Bv, Ch, Gt, GP, Ham, Hs, Hu, Ms, Rt & Sh Serum Proteins) 1:1,000 for 60 min at RT. Secondary antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody 1:40,000 in ABIN925618 for 30 min at RT. Predicted/Obsevered Size: 25 and 50 kDa for Rabbit IgG and Serum, 25 kDa for F(c) and F(ab), 70 and 23 kDa for IgM. Rabbit F(c) migrates slightly higher.



Immunofluorescence

Image 3.